



US Army Corps
of Engineers

Rock Island District



DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
INSTALLATION RESTORATION PROGRAM
ORDNANCE AND EXPLOSIVES

Archives Search Report

CONCLUSIONS AND RECOMMENDATIONS for former **LAKE SIDE CAMP FREETOWN MASSACHUSETTS**

FEBRUARY 1999



DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FOR
FORMERLY USED DEFENSE SITES

CONCLUSIONS AND RECOMMENDATIONS

**ORDNANCE AND EXPLOSIVES
ARCHIVES SEARCH REPORT
FOR THE FORMER
LAKESIDE CAMP
FREETOWN, MASSACHUSETTS
PROJECT NUMBER D01MA056601**

FEBRUARY 1999

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ORDNANCE AND EXPLOSIVES
ARCHIVES SEARCH REPORT
FOR THE FORMER
LAKESIDE CAMP:
FREETOWN, MASSACHUSETTS
PROJECT NUMBER D01MA056601

ACKNOWLEDGMENTS				
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CONCLUSIONS AND RECOMMENDATIONS

The following Conclusions and Recommendations are provided by the Archive Search Report team. These recommendations may not be the actions taken to remediate this site.

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1. INTRODUCTION

a. Subject and Purpose

(1) This report presents the conclusions and recommendations of a historical records search and site inspection for presence of ordnance and explosives (OE) located at the former Lakeside Camp, Freetown, Massachusetts (see plate 1 for general location map). The investigation was performed under the authority of the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS).

(2) The period of usage by the U.S. Army was approximately 1943 until 1947. No records were recovered that specified the actual dates. The site consists of approximately 48.70 acres and is geographically divided by State Highway 18. The northern portion provided administration, messing, barracks and a bivouac area. The southern portion may have provided a training area for small armored tank units.

(3) The purpose of this investigation was to characterize the site for potential OE presence, to include conventional ammunition and chemical warfare material (CWM). This was achieved through evaluation of all historical records available, interviews, and the on-site inspection results.

b. Scope

The conclusions and recommendations presented in this report were made from available records and the visual site inspection. The conclusions, including ordnance risk assessments, were based on direct or documented evidence and reasonably inferred evidence from the investigation. The recommendations were based on present DERP-FUDS program goals and policies with implementation subject to approval and appropriate funding actions.

2. CONCLUSIONS

a. Summary of Conclusions

Table 2-1 has been provided to summarize conclusions drawn from the on-site inspection of the former Lakeside Camp.

TABLE 2-1 SUMMARY OF CONCLUSIONS										
AREA	FORMER USAGE	PRESENT USAGE	PROBABLE END USAGE	SIZE ACRES*	FUDS ELIGIBILITY		ORDNANCE PRESENCE			R
					CONFIRMED FUDS	POTENTIAL FUDS	CONFIRMED ORDNANCE	POTENTIAL ORDNANCE	UNCONTAM- INATED	
A	Military Camp	Religious Retreat and Daycamp	Same	35.13	Yes	---	---	---	Yes	5
B	Training Area	Public Use Recreation	Same	13.57	Yes	---	---	---	Yes	5
*Indicates approximate acreage				Total	48.70					

b. Historical Site Summary

The investigation focused on approximately 48.70 acres that were identified as the Lakeside Camp (see plates 1 and 2. The U.S. Army Military Police occupied the former camp. U.S. Army armored tank units may also have used the site to occasionally bivouac during field training. The initial occupation date of the site is not known, however, it appears that at some point in 1943 the initial U.S. Army contingent arrived. The Corps of Engineers, New England District, believe that the U.S. Army ceased using the property around 1947.

c. Site Eligibility

A Preliminary Assessment (PA) of the former Lakeside Camp was authorized under DERP-FUDS. The U.S. Army Corps of Engineers, New England District, conducted the PA. The Findings and Determination of Eligibility (FDE), dated 9 September 1996 concluded that this 48.70 acre site (Site Number DOMA056601) was found to have been formerly used by the Department of Defense (DOD), and was therefore eligible for the Defense Environmental Restoration Program.

d. Visual Site Inspection

A visual on-site inspection was conducted on the former Lakeside Camp during the period of 22 through 31 October 1998. Information was obtained from residents, historians, police officers, state officials and county officials. The SI team located several knowledgeable individuals who have worked on the former site and also lived in the same area. None of these

individuals had any knowledge of OE presence on the site. The SI team inspected the land that comprised the former Lakeside Camp. The SI team did not find any evidence of CWM, Biological or OE presence during the on site inspection.

e. Confirmed Ordnance Areas

(1) **Confirmed** Ordnance and Explosives (OE) presence is based on verifiable historical record evidence or direct witness of OE items (with explosive components and/or inert debris/fragments) since site closure. Additional field data are not needed to identify a confirmed site.

(2) Verifiable historical record evidence is based on OE items actually seen on site since site closure and authenticated by: Historical records (Archive Records, Preliminary Assessment Reports, Site Investigation Reports), local fire departments and local law enforcement agencies/bomb squads, military Explosive Ordnance Disposal (EOD) units, newspaper articles, photographs, or maps.

(3) Direct witness of OE items consists of the site inspection team(s) and other credible witnesses as determined by the ASR Research Team Leader (landowners, workers on-site, soldiers who served there, etc.) verifying that they have seen OE presence on the surface or subsurface since site closure.

(4) The site does not have any areas with confirmed OE presence.

f. Potential Ordnance Areas

(1) **Potential** ordnance and explosive presence is based on a lack of confirmed OE presence. Potential OE presence is inferred from records, present day site features, non-verifiable direct witness, or indirect witness. Additional field data are needed to confirm potential OE sites.

(2) Inference from historical records is based on no OE items actually seen on site since site closure and would include documentation (records, aerial photographs, maps) indicating possible OE presence derived from common practice in production, storage, use or disposal at that time and from records indicating known OE usage.

(3) Inference from present day site features would be the indication of possible OE presence from such obvious features as target circles, depressions, mounds/backstops, OB/OD areas/pits, etc.

(4) Indirect witness would be people who have stated that they have heard of OE presence on-site (hear-say evidence). There are no areas on the subject site that have potential ordnance presence.

(5) This site does not have any areas that have a potential OE presence.

g. Uncontaminated Ordnance Areas

(1) Uncontaminated ordnance are based on lack of confirmed or potential ordnance presence. The **ENTIRE SITE** was found to be **UNCONTAMINATED**. The SI team closely inspected all areas. No ordnance presence was discovered.

(2) There were no other hazards noted.

2. RECOMMENDATIONS

a. Summary of Recommendations

Table 3-1 on the following page represents a summary of recommended actions for the former Lakeside Camp.

TABLE 3-1 Summary of Recommendations								
Area	Former Usage	Size Acres*	PA Actions		OE Actions		HTRW Actions	BD/DR Actions
			Amend INPR	No Further Action	Perform Interim Removal	Perform EE/CA	Perform SI	Perform SI
A	Military Camp	35.13	---	Yes	---	---	---	---
B	Training Area	13.57	---	Yes	---	---	---	---
Approximate * Total 48.70								

b. Preliminary Assessment Actions

Ordnance and explosive assessment actions have been completed.

c. Ordnance and Explosives Project Actions: None

It is recommended that **no further action** be taken.

d. Issues and Concerns: None

There are no issues or concerns.

e. Other Environmental Remediation Actions

There may have been a underground fuel storage tank left on the premissis (see paragraph 6.b.(2) and photograph J-9 in the findings volume).

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RISK ASSESSMENT

RISK ASSESSMENT PROCEDURES FOR
ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name	<u>Lakeside Camp</u>	Rater's Name	<u>James L. Aschnewitz</u>
Site Location	<u>Freetown, MA</u>	Phone No.	<u>(309) 794-6035</u>
DERP Project #	<u>DO1MA056601</u>	Organization	<u>CEMVR-ED-DO</u>
Date Completed	<u>28 February 1999</u>	RAC Score	<u>5</u>

OE RISK ASSESSMENT: **ENTIRE SITE**

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The RAC score will be used by CEHNC to prioritize the remedial action at Formerly Used Defense Sites. The OE risk assessment should be based upon best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) detachment actions, and field observations, interviews, and measurements. This information is used to assess the risk involved based upon the potential OE hazards identified at the site. The risk assessment is composed of two factors, **hazard severity and hazard probability**. Personnel involved in visits to potential OE sites should view the CEHNC videotape entitled "A Life Threatening Encounter: OE."

Part 1. Hazard Severity. Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel exposure to various types and quantities of unexploded ordnance items.

TYPES OF ORDNANCE (Circle all values that apply)

A. Conventional Ordnance and Ammunition	VALUE
Medium/Large Caliber (20 mm and larger)	10
Bombs, Explosive	10
Grenades, Hand and Rifle, Explosive	10
Landmines, Explosive	10
Rockets, Guided Missiles, Explosive	10
Detonators, Blasting Caps, Fuzes, Boosters, Bursters	6
Bombs, Practice (w/spotting charges)	6
Grenades, Practice (w/spotting charges)	6
Landmines, Practice (w/spotting charges)	4
Small Arms, Complete round (.22 cal-.50 cal)	1
Small Arms, Expended	0

Conventional Ordnance and Ammunition 0

(Select the largest single value)

What evidence do you have regarding conventional OE? The former
Lakeside Camp was used as a bivouac and training area by the U.S. Army.
armored tank units possibly used Area B for field maneuvers. The area
(13) acres is much too small for using any ordnance other than small arms.
No evidence of OE fragments or craters were visible on the site.

B. Pyrotechnics. (For munitions not described above)

VALUE

Munition (Container) Containing
White Phosphorous or other
Pyrophoric Material (i.e.,
Spontaneously Flammable) 10

Munition Containing a Flame
or Incendiary Material (i.e. Napalm,
Triethylaluminum Metal Incendiaries) 6

Flares, Signals, Simulators, Screening
Smoke (other than WP) 4

Pyrotechnics (Select the largest single value) 0

What evidence do you have regarding pyrotechnics? There was no
evidence of pyrotechnics. No pyrotechnic storage facilities were
on site.

C. Bulk High Explosives (Not an integral part of convention ordnance;
uncontainerized.)

VALUE

Primary or Initiating Explosive
(Lead Styphnate, Lead Azide,
Nitroglycerin, Mercury Azide,
Mercury Fulminate, Tetracene, etc.) 10

Demolition Charges 10

Secondary Explosives 8
(PETN, Composition A, B, C,
Tetryl, TNT, RDX, HMX, HBX,
Black Powder, etc).

Military Dynamite 6

Less Sensitive Explosives 3
(Ammonium Nitrate, Explosive D, etc.).

High Explosives (Select the largest single value) 0

What evidence do you have regarding bulk explosives? There was
no evidence of bulk explosives.

D. Bulk Propellants (Not an integral part of rockets, guided missiles, or
other conventional ordnance; uncontainerized)

VALUE

Solid or Liquid Propellants 6

Propellants 0

What evidence do you have regarding propellants? No evidence of
propellants was found. No propellants were ever on site.

E. Chemical Warfare Material and Radiological Weapons

	VALUE
Toxic Chemical Agents (Choking, Nerve, Blood, Blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control and Miscellaneous (Vomiting, Tear)	5
Chemical and Radiological (Select the largest single value)	<u>0</u>
What evidence do you have of chemical/radiological OE? or documentation of chemicals or chemical use.	<u>No evidence</u>

=====

TOTAL HAZARD SEVERITY VALUE 0
 (Sum of Largest Values for A through E--Maximum of 61).
 Apply this value to Table 1 to determine Hazard Severity Category.

TABLE 1

HAZARD SEVERITY*

Description	Category	Hazard Severity Value
CATASTROPHIC	I	21 and greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4

**NONE

0

* Apply Hazard Severity Category to Table 3.

** If Hazard Severity Value is 0, you do not need to complete Part II. Proceed to Part III and use a RAC score of 5 to determine your appropriate action.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table 3. Enter with the results of the hazard probability and hazard severity values.

TABLE 3

Probability Level		FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
Severity Category:						
CATASTROPHIC	I	1	1	2	3	4
CRITICAL	II	1	2	3	4	5
MARGINAL	III	2	3	4	4	5
NEGLIGIBLE	IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

RAC 1 Expedite INPR, recommending further action by CEHNC - Immediately call CEHNC-OE-ES - commercial (205) 895-1582 or DSN 645-1582.

RAC 2 High priority on completion of INPR - Recommend further action by CEHNC.

RAC 3 Complete INPR - Recommend further action by CEHNC.

RAC 4 Complete INPR - Recommend further action by CEHNC.

RAC 5 Usually indicates that no further action (NOFA) is necessary. Submit NOFA and RAC to CEHNC.

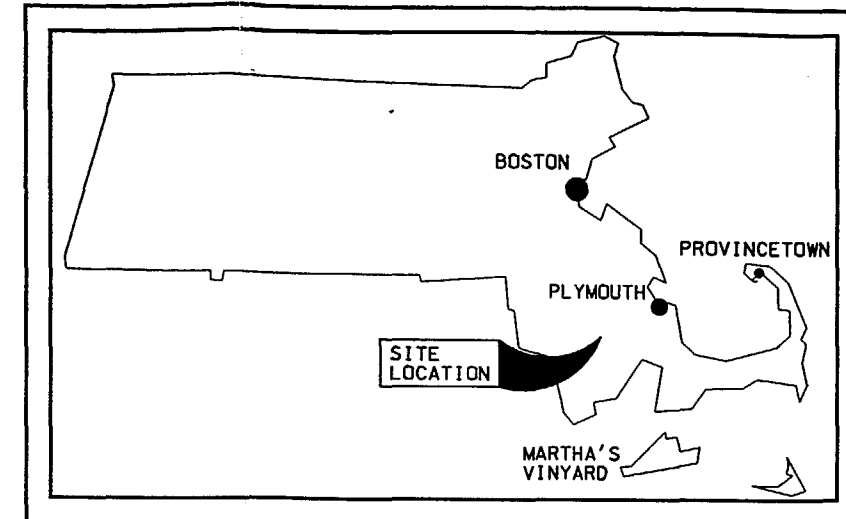
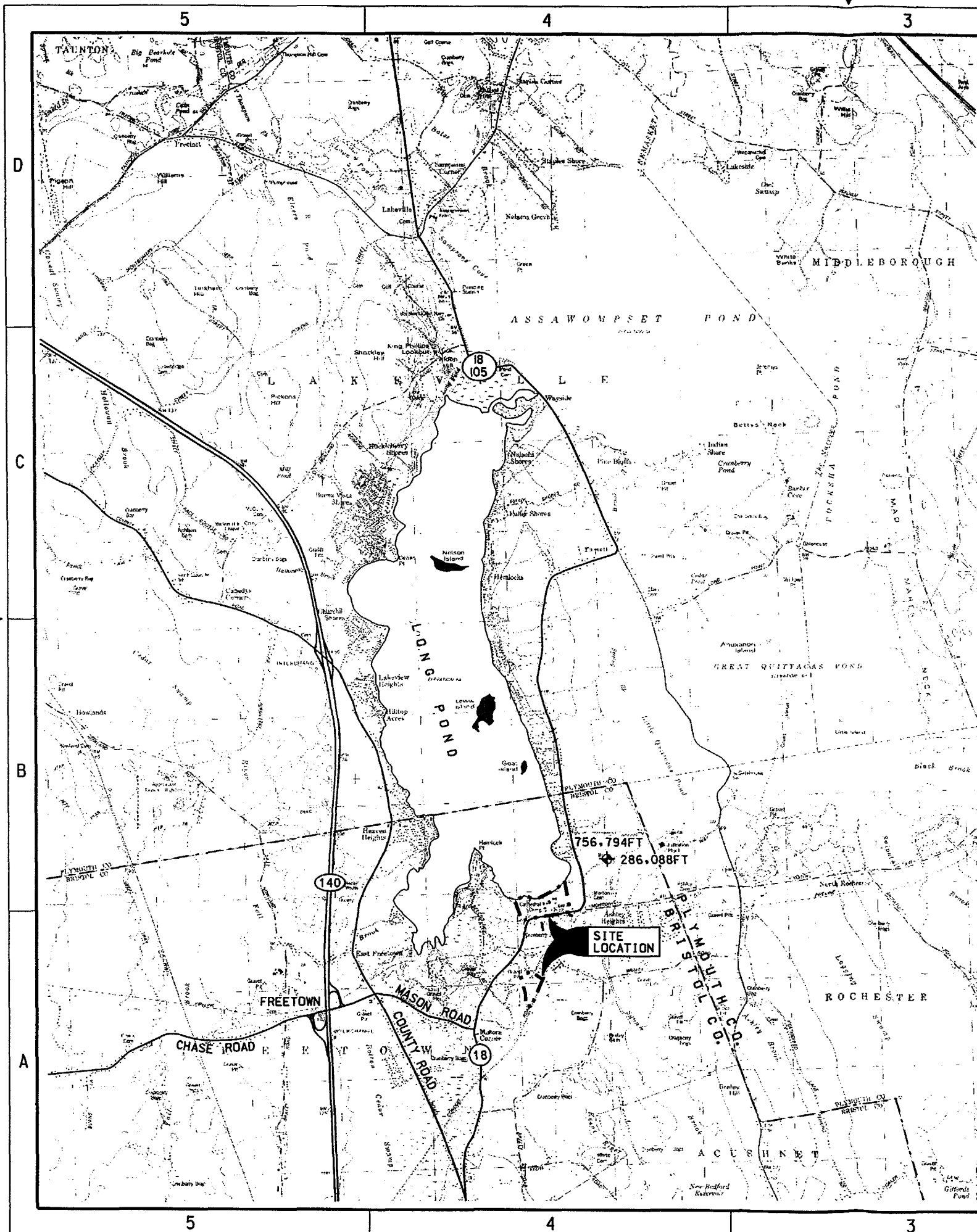
Part IV. Narrative. Summarize the documented evidence that support this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

An in-depth search of records, numerous interviews with knowledgeable local civilians and military and civilian bomb squads did not produce any evidence of OE presence. The SI team performed a close and careful site inspection of the former Lakeside Camp. Area A was used as an administrative support and barracks area. There were no ordnance storage facilities on the grounds. Area B, was possibly used by tank units that bivouac at Lakeside Camp for practicing soldiering skills, however no large caliber artillery practice could have been accomplished because of the close proximity of homes and business establishments. The entire area is only a little more than 13 acres which does not nearly meet the requirements for firing .50 caliber or larger ammunition. There are no craters, ordnance fragments or any type indication of military usage. Recommend NOFA for the entire site.

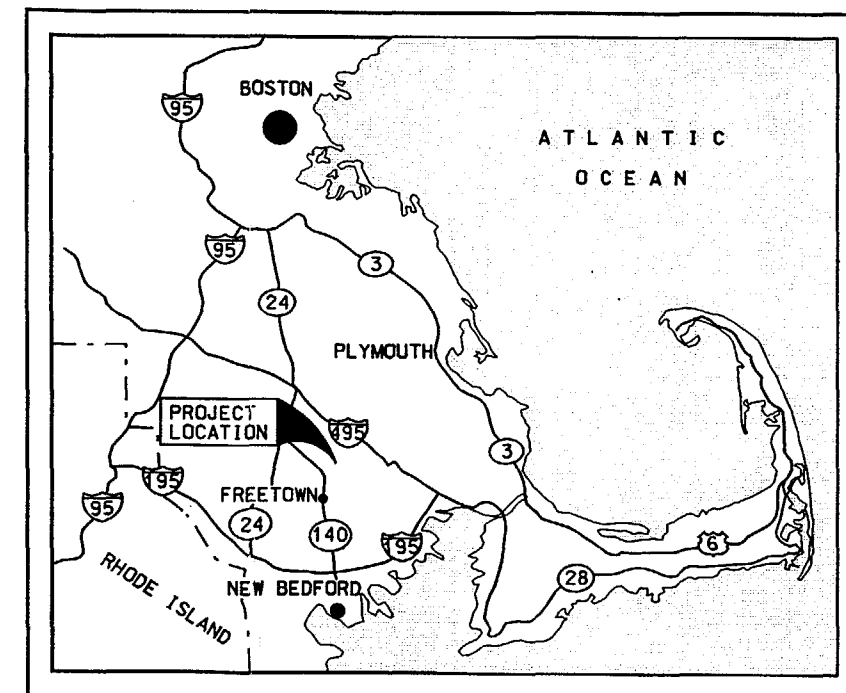
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Report Plates

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STATE MAP OF MASSACHUSETTS



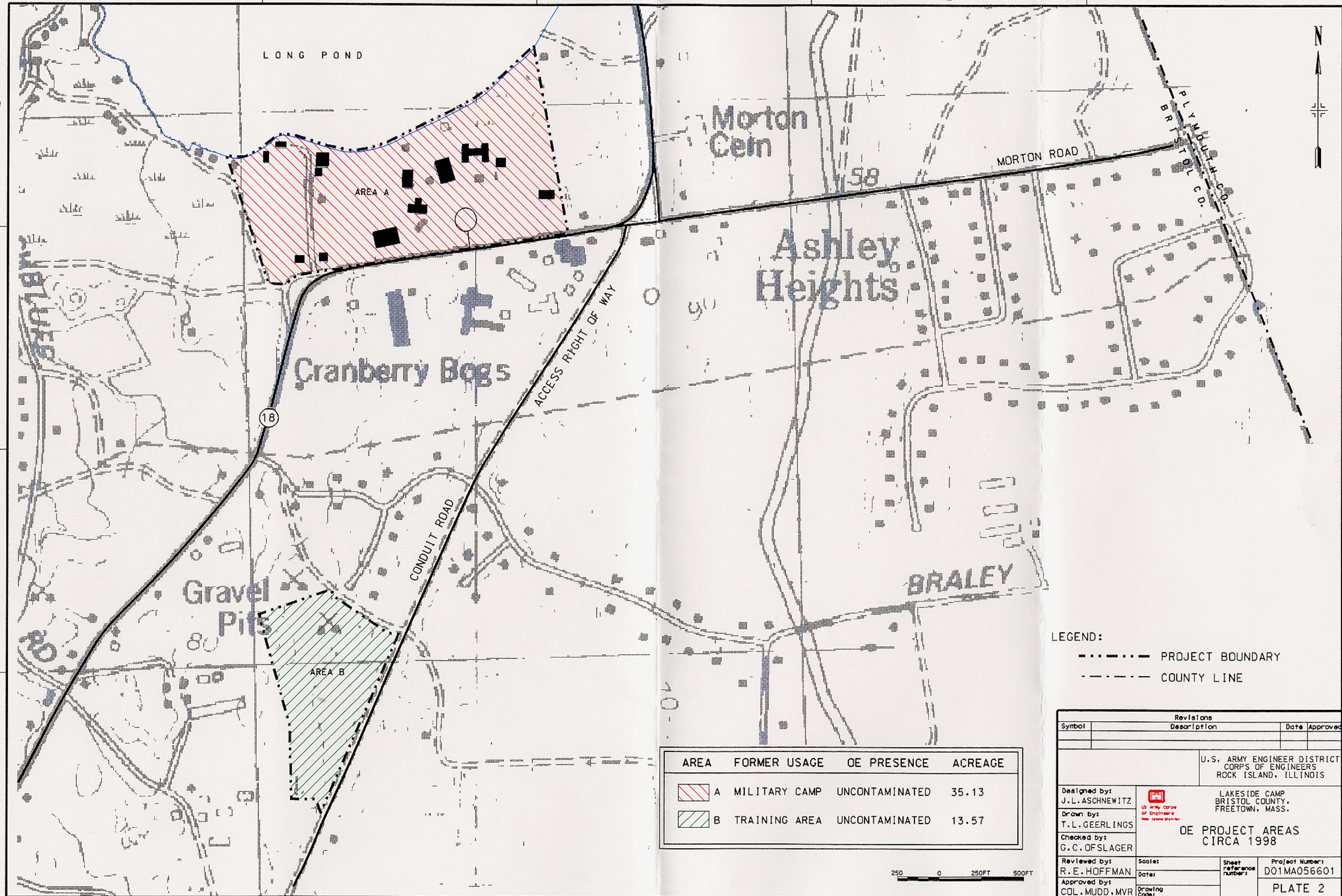
VICINITY MAP

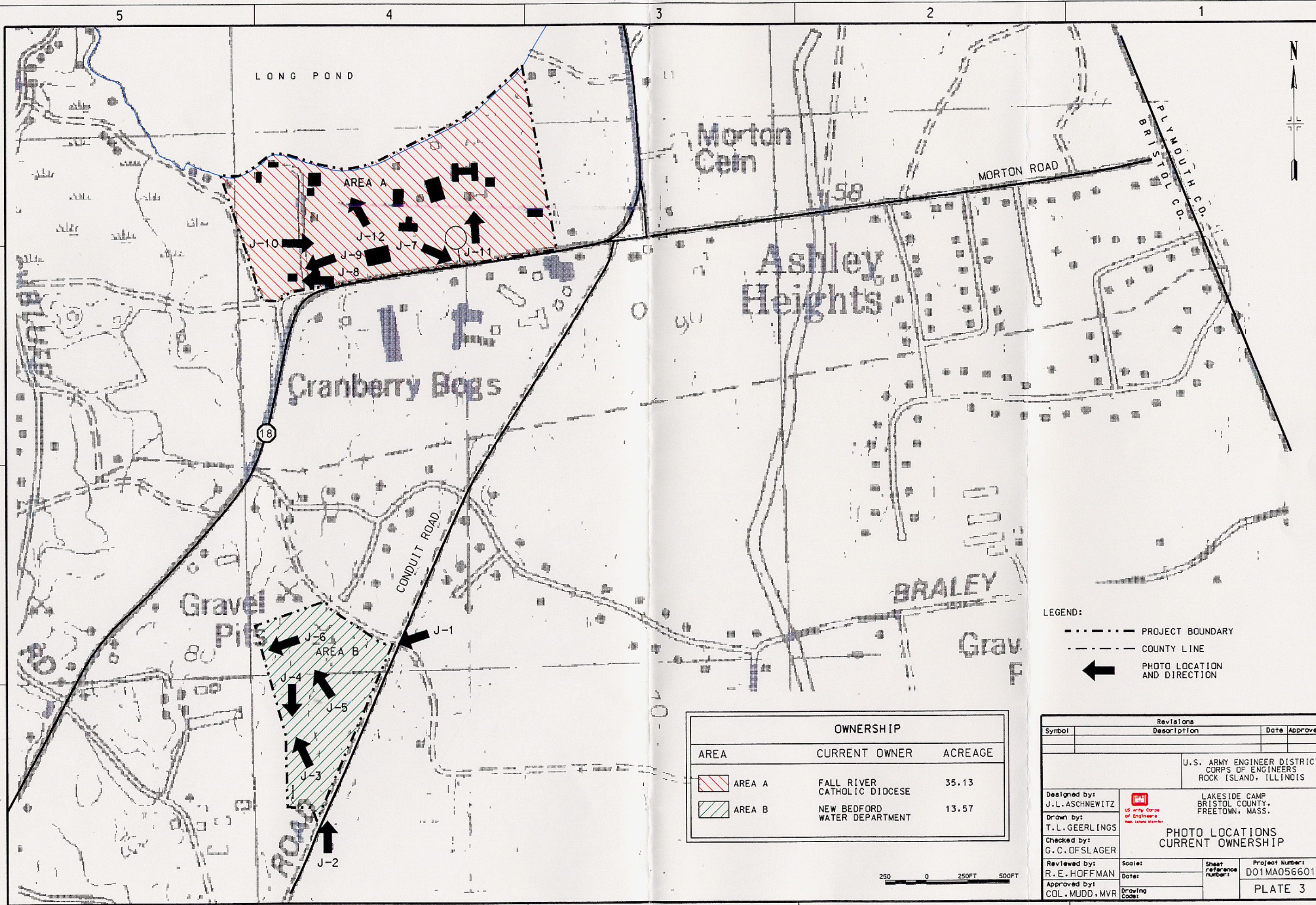
LEGEND:

- PROJECT BOUNDARY
- COUNTY BOUNDARY
- + BENCH MARK WITH STATE PLANE COORDINATES
- INTERSTATE HIGHWAY
- FEDERAL HIGHWAY
- STATE / LOCAL ROADS

2,000FT 0 2,000FT 4,000FT

Revisions		
Symbol	Description	Date / Approved
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ROCK ISLAND, ILLINOIS		
Designed by: J.L. ASCHNEWITZ	US Army Corps of Engineers Rock Island District	LAKESIDE CAMP BRISTOL COUNTY, FREETOWN, MASS.
Drawn by: T.L. GEERLINGS		
Checked by: G.C. OFSLAGER		
Reviewed by: R.E. HOFFMAN	Scales	Project Number: D01MA056601
Approved by: COL. MUDD, MVR	Date:	
	Drawings Code:	
		PLATE I





Revisions		Date	Approved
Symbol	Description		
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ROCK ISLAND, ILLINOIS			
Designed by: J.L. ASCHNEWITZ		LAKESIDE CAMP BRISTOL COUNTY, FREETOWN, MASS.	
Drawn by: T.L. GEERLINGS		PHOTO LOCATIONS CURRENT OWNERSHIP	
Checked by: G.C. OFSLAGER		Project Number: D01MA056601	
Reviewed by: R.E. HOFFMAN		Scale: Date:	Sheet reference number:
Approved by: COL. MUDD, MVR		Drawing Code:	PLATE 3

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